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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/836,369	10/20/97	SCHMIDT	V RSG 8379 US
<input type="checkbox"/>		MM22/0119	EXAMINER HIRSHFELD, A
			ART UNIT 2859
			PAPER NUMBER 32
		DATE MAILED: 01/19/00	

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks**

**Office Action Summary**

Application No. <b>08/836,369</b>	Applicant(s) <b>Schmidt</b>
Examiner <b>Andrew Hirshfeld</b>	Group Art Unit <b>2859</b>

 Responsive to communication(s) filed on Oct 29, 1999 This action is FINAL. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims** Claim(s) 1, 3, and 82 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

 Claim(s) \_\_\_\_\_ is/are allowed. Claim(s) 1, 3, and 82 is/are rejected. Claim(s) \_\_\_\_\_ is/are objected to. Claims \_\_\_\_\_ are subject to restriction or election requirement.**Application Papers** See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner. The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved. The specification is objected to by the Examiner. The oath or declaration is objected to by the Examiner.**Priority under 35 U.S.C. § 119** Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

 Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).**Attachment(s)** Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper No(s). 29 Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 2859

**DETAILED ACTION**

***Information Disclosure Statement***

1. The information disclosure statement filed October 1, 1999 fails to comply with 37 CFR 1.98(a) (3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of German patent document 29 19 889. Accordingly, this document has not been considered.

***Inventorship***

2. In view of the papers filed December 20, 1999 and June 16, 1999, it has been found that this nonprovisional application, as filed, through error and without deceptive intent, improperly set forth the inventorship, and accordingly, this application has been corrected in compliance with 37 CFR 1.48(a). The inventorship of this application has been changed by adding William Menchine, Hans-Jurgen Rostalski, and Frank Wyrowski as inventors.

The application will be forwarded to the Office of Initial Patent Examination (OIPE) for issuance of a corrected filing

Art Unit: 2859

receipt, and correction of the file jacket and PTO PALM data to reflect the inventorship as corrected.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1,3 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollander et al. (5,368,392).

Hollander et al. '392 teaches a device and method for outlining an energy zone on a surface whose temperature is to be measured. The device includes a pistol grip radiometer in combination with a laser aiming device. In the embodiment illustrated in figures 5 and 10, the laser device includes a means for simultaneously emitting a plurality of more than two laser beams towards the surface to outline the energy zone. In figure 10, the beams are divergent. As stated in col. 6, lines 49-51, individual lasers can be used or laser splitting devices

Art Unit: 2859

can be used to split a single laser beam. The temperature measurement device can be positioned on the central axis of the plurality of laser beams, downstream of the beam splitter.

Hollander et al. '392 does not teach the sighting arrangement having a diffractive optical system (particularly that formed by a holographic element).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hollander et al. '392 by replacing the beam splitter thereof with a diffractive optical system, such as one formed by a holographic element, since such a diffractive optical system and the beam splitter of Hollander et al. '392 are equivalent and alternative devices for creating an image from a beam of light. One having ordinary skill in the art at the time the invention was made would recognize that any conventional beam splitting device could suffice in the device of Hollander et al. '392.

Please note that the declaration of William Menchine, filed June 16, 1999, shows that diffraction gratings for generating a circle were known in the art prior to applicant's invention.

Art Unit: 2859

5. Claims 1, 3 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over German patent document 32 13 955 in view of British patent document 2 203 537.

German patent document 32 13 955 teaches a device for measuring temperature wherein a detector includes means for capturing infrared energy and a sighting arrangement for splitting an incident beam of light into first and second beams 13' and 13''. The beams 13' and 13'' mark the diameter of a measurement spot on an object to be measured by producing diametrically opposed visible marks.

German patent document 32 13 955 does not teach outlining the measurement spot; and the sighting arrangement having a diffractive optical system (particularly one formed by a holographic element).

British patent document 2 203 537 teaches the combination of a radiometer and a sighting device wherein a masking element is placed in front of a visible light source so that light from the source will outline (by means of a circle) the periphery of an energy zone on a target surface.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify German patent document 32 13 955 by replacing the beam splitter thereof

Art Unit: 2859

with a system that creates a circle to outline the measurement spot, since British patent document teaches that a circular outline of an energy zone can provide valuable information concerning the zone, such as the exact position of the zone. One having ordinary skill in the art would recognize, based upon the combined teachings of German patent document 32 13 955 and British patent document 2 203 537, that laser beams arranged in a circular configuration around an energy zone would provide a more accurate indication of the energy zone than merely two diametrically opposed beams. Therefore, the proposed combination would improve the device of German patent document 32 13 955 by enabling it to provide a more accurate indication of the energy zone.

Also, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a diffractive optical system (such as that formed by a holographic element) to generate the circular outline, since all beam splitters are alternative and equivalent devices for creating a plurality of beams from a single beam, and it is apparent that any beam splitter could function in the device of German patent document 32 13 955.

Art Unit: 2859

***Response to Amendment***

6. In response to applicant's argument that the present invention generates a center spot and also generates light inside the energy zone, these arguments are moot since such features are not claimed. Although applicant's claims include a diffractive optical system, there is nothing in the claims directed to light components inside and outside of the energy zone, nor to a center spot.

7. In response to applicant's argument that there is nothing in Hollander that would suggest use of a diffractive optical system, Hollander discloses that the desired light pattern can be made from many alternative devices, such as beam splitters. This teaching is sufficient to lead one having ordinary skill in the art to recognize that any alternative and equivalent known device for creating a circular image could be used. As stated above, a diffractive optical system is considered to be alternative and equivalent to the beam splitter disclosed by Hollander et al.

Applicant has stated that a diffractive optical system would not meet the design goals described in Hollander et al. of outlining only the periphery. However, applicant has not stated why this is so. Therefore, since it appears to the examiner that

Art Unit: 2859

a diffractive optical system could be utilized to outline a periphery in the manner of Hollander et al., the rejection of applicant's claims is deemed proper.

8. With regard to applicant's argument that there is no teaching in the German document of generating more than two beams, the combined teachings of the German and British references would lead one of ordinary skill in the art to the conclusion that it would be desirable to modify the German reference to generate more than two beams. This modification would improve the German device by enabling it to provide a more accurate indication of the energy zone by means of an outline.

9. On page 6 of the amendment files October 29, 1999, applicant has stated that in a diffractive optical system it is inherent that light will be generated inside the energy zone. However, it is not clear why the generation of light inside the energy zone is different for a diffractive optical system than it is for the systems of the applied references. All beams, whether laser or not, are somewhat diffuse. Therefore, it is inherent that in any of the prior art systems, there will be at least some minimal amounts of light entering the energy zone. For example, even

Art Unit: 2859

though the British reference states that the patch is to prevent the test result from being distorted by the illumination of the target area 24 with visible light, it is clear that at least minimal amounts of light will enter the target area 24.

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2859

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Andrew Hirshfeld whose telephone number is (703) 305-6619.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.



Andrew Hirshfeld  
Primary Examiner  
Art Unit 2859  
January 13, 2000